ABSTRACT

A method and apparatus for processing satellite positioning system (SPS) signals which are weak in level. In one embodiment, a SPS receiver receives at least two signal samples representing, at least in part, common information, wherein the two signal samples are associated with one or more satellite messages. By combining the two signal samples, navigation information (e.g., time, position, velocity, etc.) may be determined based on the combination of the two signal samples. According to another embodiment, the two signal samples are differentially demodulated and summed together to form the combination.